



BUCKET NO.: ROME-0003

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Lawrence C. Rome

Application No.: 10/803,112

Filing Date: March 17, 2004

For: A BACKPACK FOR HARVESTING ELECTRICAL ENERGY DURING
WALKING AND FOR MINIMIZING SHOULDER STRAIN

Confirmation No.:

Group Art Unit: Not Yet Assigned

Examiner: Not Yet Assigned

DATE OF DEPOSIT:

May 20, 2004

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Michael P. Dunnam

TYPED NAME: Michael P. Dunnam
REGISTRATION NO.: 32,611

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).



In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;

or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☒ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:

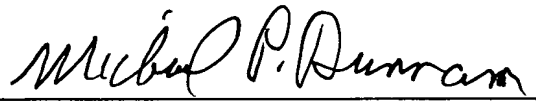
- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☐ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☐ Copies of references [list as appropriate] listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No.

, filed .

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date: *May 20, 2004*


Michael P. Dunnam
Registration No. 32,611

WOODCOCK WASHBURN LLP
One Liberty Place - 46th Floor
Philadelphia, PA 19103
Telephone: (215) 568-3100
Facsimile: (215) 568-3439



Form PTO-1449 Modified List of Patent and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce Patent and Trademark Office		Docket No. ROME-0003	Application No. 10/803,112
		Applicant Lawrence C. Rome	
		Filing Date March 17, 2004	Group Not Yet Assigned
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	1	"Energy Scavenging with Shoe-Mounted Piezoelectrics Piezoelectric Shoe Power; Two Approaches", <i>IEEE Micro, Computer.org</i>, http://www.computer.org/micro/homepage/may_june/shenck/01.htm, February 28, 2003	
	2	"Pedaling onto the Information Superhighway" http://cnn.technologyprintthis.clickability.com, February 18, 2003, 2 pages	
	3	Engsberg, J. et al., "Comparison of Effort Between Below-Knee Amputee and Normal Children", <i>Journal of the Association of Children's Prosthetic-Orthotic Clinics</i>, 1991, 26(2), 46-53	
	4	Fedak, M.A. et al., "One-step N2-Dilution technique for calibrating Open-Circuit VO2 Measuring Systems", <i>Journal of Applied Physiology</i>, 1981, R51, 772-776	
	5	Hirano, M. et al., "Jumping Performance of Frogs(<i>Rana Pipiens</i>) as a Function of Muscle Temperature", <i>Journal of Experimental Biology</i>, 1984, 108,429-439	
	6	Hong, Y. et al., "Gait and Posture Responses to Backpack Load during Level Walking in Children", <i>Gait and Posture</i>, 2003, 17(1), 28-33	
	7	Kram, R., "Carrying Loads with Springy Poles", <i>Journal of Applied Physiology</i>, 1991, 71(3), 1119-1122	
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	9	Lutz, G.J. et al., "Built for Jumping: The Design of the Frog Muscular System", <i>Science</i>, 1994, 263, 370-372	
	10	Negrini, S. et al., "Backpack as a Daily Load for Schoolchildren", <i>The Lancet</i>, 1999, 354(9194), 1974	
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	11	Taimela, S. et al., "The Prevalence of Low Back Pain Among Children and Adolescents: A Nationwide, Cohort-based Questionnaire Survey in Finland", <i>Spine</i> , 1997, 22(10), 1132-1136	
	12	Troussier, B. et al., "Back Pain in School Children a Study Among 1178 Pupils", <i>Scandinavian Journal of Rehabilitation Medicine</i> , 1994, 26, 143-146	
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	14	De Gaspari, J. et al., "Hot Stuff, Advanced Materials are moving out of the Lab and Into the Commercial World", <i>Mechanical Engineering</i> , 2002, 32-35	
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	17	Park, et al., "Ultrahigh Strain and Piezoelectric Behavior in Relaxof Based Ferroelectric Single Crystals", <i>J. Appl. Phys.</i> , 1997, 82, 1804	
	18	Pelrine, et al., "Dielectric Elastomers: generator Mode Fundamentals and Applications", <i>Proceedings of SPIE-The International Society for Optical Engineering</i> , 2001, 4329, 148-156	
	19	Shenck, N.S. et al., "Energy Scavenging with Shoe-Mounted Piezoelectrics", <i>IEEE</i> , 2001, 30-42	
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	20	Stanford, S. et al., "Electroactive Polymer Artificial Muscle for Underwater Robotics", <i>SRI International</i> , 10 pages	
	21	Xia, et al., "High Electromechanical Responses in Terpolymer of Poly(vinylidene fluoride trifluoroethylene-chlorofluoroethylene)", <i>Adv Masters</i> , 2002, 14, 1574-1577	
	22	Kymissis, J. et al., "Parasitic Power Harvesting in Shoes", <i>IEEE Int'l Conference Wearable Computing</i> , 1998, 132-139	
	23	Davies, C.T.M. et al., "Maximal Mechanical Power Output of Cyclists and Young Adults", <i>European Journal of Applied Physiology</i> , 1989, 58, 838-844	
	24	Martin, J.C., "Inertial-load Method Determines Maximal Cycling Power in a Single Exercise Bout", <i>Medicine and Science in Sports and Exercise</i> , 1997, 29(11), 1505-1512	
	25	Vandewalle, H. t al., "Force-Velocity relationship and Maximal Cycling Power on a Cycle Ergometer Correlation with the Height of a Vertical Jump", <i>European Journal of Applied Physiology</i> , 1987, 56, 6650-656	
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	28	Saltin, B. et al., "Maximal Oxygen Uptake in Athletes", <i>Journal of Applied Physiology</i> , 1967, 23, 353-358	
	29	Franklin, B.A. et al., "ACSM's Guidelines for Exercise Testing and Prescription", 6 th Ed., page 303	
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	30	Biewener, A.A. et al., "In Vivo Muscle Force-Length Behavior During Steady-Speed Hopping in Tammar Wallabies", <i>Journal of Experimental Biology</i> , 1998 , 201(pt11), 1681-1694	
	31	Roberts, T.J. et al., "Muscular force in Running Turkeys: The Economy of Minimizing Work", <i>Science</i> , 1997 , 21:275(5303), 1113-1115	
	32	Alexander, R.M. et al., "The Role of Tendon Elasticity in the Locomotion of the Camel", <i>Journal of Zoology</i> , 1982 , 198, 293-313	
	33	Alexander, R.M. "Energy-Saving Mechanisms in Walking and Running", <i>Journal of Experimental Biology</i> , 1991 , 160, 55-69	
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	36	Taylor, C.R. et al., "The Energetic Cost of Generating Muscular Force During Running", <i>Journal of Experimental Biology</i> , 1980 , 86, 9-18	
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	39	Balague, F. et al., "Non-Specific Low Back Pain in Children and Adolescents: Risk Factors", <i>European Spine Journal</i> , 1999 , 8(6), 429-438	
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	42	Chansirinukor, W. et al., "Effects of Backpacks on Students: Measurement of Cervical and Shoulder Posture", <i>Australian Journal of Physiotherapy</i> , 2001, 47(2), 110-116	
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U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
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	46	5,617,984	04/08/97	Fabel	224	641
	47	5,696,413	12/09/97	Woodbridge, et al.	310	15
	48	5,769,431	06/23/98	Cordova	280	1.5
	49	5,818,132	10/06/98	Konotchick	310	17
	50	6,020,653	02/01/00	Woodbridge, et al.	290	53
	51	6,360,534 B1	03/26/02	Denniss	60	398
	52	6,545,384 B1	04/08/03	Pelrine, et al.	310	309
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	54	6,622,483 B2	09/23/03	Denniss	60	398

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO

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	55	2001/0035723	11/01/01	Pelrine, et al.	318	116
	56	2003/0062723 A1	04/03/03	Mancl, et al.	290	1

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					YES	NO

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